Remarks

In the Office Action of September 3, 2002 the Examiner rejected claims 1-17, all claims pending.

The Examiner first objected to the specification as failing to provide proper antecedent basis for claim 7 (rear deck region) and claims 12, 15 and 17.

Claim 7 has been amended to refer to "rear wall" which is supported by the reference at page 4, line 3 of the specification. Claim 12 has been amended to overcome the objection. Support for claim 12 can be found at page 5, lines 8-9. Claim 15 is canceled without prejudice. Claim 17 has been amended to correct for clarity and antecedent basis problems. The sealing surfaces are provided by the side rails 58, 59 shown in figure 2 and described in the summary of the invention at page 2, lines 3 and 6-11. The detailed description of the preferred embodiments has been amended accordingly by relying on Fig. 2 and the description in the summary of the invention. No new matter is added.

The Examiner next objected to the drawings for not showing the features of the claimed invention. However, the structure of claim 8 is shown in figure 4. The structure of amended to claim 12 is shown in figure 2. The structure of claim 14 is shown in figure 2. The specification has been corrected to indicate that the mounts 106-109 are used for the step. Since one of skill in art would recognize that the step is located at the position of the mounts 106-109 in a tractor, no new matter is added.

The structure of claim 17 is shown in Figure 2 of the specification as elements 58, 59, the side rails of the contoured body of the floor and fender structure 30.

The Examiner next rejected claim 17 under 35 USC 112 for indefiniteness. Applicants have corrected the language of claim 17 to delete the word "storage" which should overcome his rejection. According to the preferred embodiment, the features for forming window and door sealing surfaces are the side rails 58, 59 of the contoured body.

The Examiner next rejected claims 1-2, 4-5, 7, 11-12 and 16 under 35 USC 102 (b) as being anticipated by *Taylor*. However, the Applicants have amended claim 1 to clarify that the invention includes an integral floor and fender structure formed by a contoured body substantially composed of plastic material; and the metal cab frame is supported on a top side of the contoured body.

According to the preferred embodiment of the invention, advantages are achieved by securing a metal cab frame onto a top of a one piece, plastic cab floor and fender structure. Preferably, the cab floor and fender structure includes longitudinally arranged recesses that receive longitudinally directed bottom side members of the cab frame. Preferably the bottom side members are adhesively secured into the recesses. According to this embodiment, penetrations through the cab floor and fender structure to allow for the connection of the frame members to the chassis are avoided. Such penetrations are shown for example in Figures 2 and 3 of *Nelson et al.*, cited by the Examiner. By reducing penetrations, points of noise and water entry

into the cab are reduced. By mounting the cab frame to a top side of the floor and fender structure, assembly is simplified. Furthermore, by mounting the cab frame onto a top side of the floor and fender structure, and providing the floor and fender structure with side rails to provide door and window sealing surfaces, the metal frame need not be extended outwardly to provide these sealing surfaces. A less complex and less costly frame structure can be provided.

Taylor describes a vehicle cab floor made as a one-piece plastic molding. However, there is no description that a cab frame would be carried on top of the plastic cab floor. The specification at page 1, line 79-82 states that: "To either side of the tunnel portion 2 the floor 1 has at the front a lower portion 3 to accommodate the feet of the driver and his mate or passenger." Accordingly, one of skill in the art would take from this description that the vehicle described in *Taylor* is a passenger vehicle such as an automobile. It is not suggested in this reference to have a metal cab frame supported on a top side of a plastic cab floor.

Applicants submit that the rejection of claims 1-2, 4-5, 7, 11-12 and 16 has been overcome and requests withdrawal of the rejection of the claims.

The Examiner next rejected claims 3, 8-10 under 35 USC 102 (b) as anticipated by or, in the alternative, obvious under 35 USC 103 (a) over *Taylor*. However, as discussed above, *Taylor* does not disclose or suggest the inventive feature of mounting a metal cab frame on a top side of a plastic contoured body that forms a floor and fender structure.

Applicants submit that the rejection of claims 3, 8-10 has been overcome and requests withdrawal of the rejection of the claims.

The Examiner next rejected claims 6 and 13 under 35 USC 103 (a) as being unpatentable over *Taylor* in view of *Richards*. However, *Richards*, like *Taylor* also does not disclose or suggest a metal cab frame mounted onto a top of a plastic contoured body that forms a floor and fender structure. The vehicle in *Richards* does not have a structure corresponding to a metal cab frame. Furthermore, as described at column 5, line 60 to column 6 line 35, and shown in figures 8 and 9, of *Richards*, external rollbar 46 and struts 47 are not supported on a top surface of the plastic flanges 74, 75 but are instead mounted on metal spacers 92, 102 that are welded to the top surface of the side rails 52, 53 of a frame 50, and which spacers penetrate through the plastic flanges.

Applicants submit that the rejection of claims 6 and 13 has been overcome and requests withdrawal of the rejection of the claims.

The Examiner next rejected claim 14 under 35 USC section 103 (a) as being compatible over Taylor. However as set forth above *Taylor* does not disclose a metal cab frame being mounted on a top side of a plastic contoured body.

Applicants submit that the rejection has been overcome and requests withdrawal of the rejection of claim 14.

The Examiner next rejected times 15 and 17 under 35 USC 103(a) as being unpatentable over *Taylor* in view of *Bonnett et al.* Claim 15 has been canceled without prejudice.

Bonnett et al. also does not disclose the arrangement of independent, base claim 1 that a metal cab frame is supported on a top side of the plastic floor and fender structure. *Bonnett et al.* describes various truck cab constructions which for the most part comprised two piece upper and lower cab halves. A first embodiment sets forth upper and lower halves made of plastic that are then adhesively secured together. A second embodiment describes upper and lower cab halves of sheet metal that are also adhesively secured together. This reference does not disclose a metal cab frame that is supported on a plastic floor and fender structure. Since none of the references describe this important feature of independent claim 1, the rejected claim 17 should now be allowable.

Applicants have added new claims 18-34 which also describe patentable inventions and should also be allowable.

Respectfully submitted

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MARKED-UP VERSION TO SHOW CHANGES MADE

In The Drawings

Please amend Figure 4 by changing "102" to --202--; "104" to --204--; and "106" to --206--.

In The Specification

On page 3 please amend the paragraph that begins on line 17 to read as follows:

--Figure 1 illustrates a utility vehicle 10, such as a compact tractor, incorporating the present invention. The utility vehicle 10 includes a steel frame 12 as part of an operator area or cab 14 supported on a chassis 16 which is supported on front wheels 18 and larger rear wheels 20. A floor and fender structure 30 is supported on the chassis 16. The floor and fender structure 30 supports an operator's seat 34 including a seat portion 36 and a back portion 38.--

On page 4, please amend the paragraph that begins on line 1 to read as follows:

--Figures 2-3 illustrate the floor and fender structure 30. The structure 30 is formed by a contoured body. The floor and fender structure 30 includes a foot supporting area 42, a seat supporting region 44, including a seat support 46 and rear wall 48. The structure 30 further includes a first fender 54 and a second fender 56. The first fender 54 includes a raised rail 54a and a recessed rail 54b, substantially in line, to accommodate [a] the steel frame 12. The recessed rail 54b extends across the foot supporting area 42. The

first fender 54 further includes an oblique recessed rail 54c which extends from the fender down into the foot supporting area 42. The recessed rail 54c provides a chase for electrical wires and mechanical cables for controls.--

On page 4, please amend the paragraph that begins on line 11 to read as follows:

-- The second fender 56 includes a recessed rail 56a which extends down the fender and across the foot supporting area 42 to accommodate [a] the steel frame 12. At a front of the foot supporting area 42 is a humped area or "tunnel" 45 for providing clearance for the drive train beneath the floor and fender structure 30. --

On page 4 after the second paragraph, at line 16 please add the following paragraph:

--The structure 30 includes side rails 58, 59 (Figure 2) adjacent to the door or window opening that increases the overall rigidity of the floor and fender structure 30 as well as providing sealing surfaces.--

On page 4, please amend the paragraph that starts at line 20 to read as follows:

--The structure 30 includes mounting surfaces and features 100-113 to allow mounting of controls, a battery, a fuel tank, a step and a steering column. Mounts 100-103 are for the controls, mount 104 is for the battery, mounts 106-108 are for the step, mounts [106-113] 109-113 are for the fuel tank, and mount 105 is for the steering column. Hole 200 allows the fuel tank filler neck to penetrate the structure 30. Feature 49 is for operator's manual and tool storage.--

On page 5, please amend the paragraph that starts at line 3 to read as follows:

--Figure 4 illustrates a cross-section of a composite used for the structure 30. A layer of fiberglass [102] 202 is sandwiched by a top first layer of RIM material [104] 204 and a bottom second layer of RIM material [106] 206. The composite gives the structure 30 exemplary rigidity and strength while retaining a lightweight character.--

On page 5, please amend the paragraph that starts at line 12 to read as follows:

--Figures 5 through 7 illustrate the frame 12 mounted on the floor and fender structure 30. Side members 12a and 12b fit within the side recessed rails 54b, [54a] 56a. The frame 12 can be attached to the structure 30 by fasteners or other means. The side members 12a, 12b can also be adhesively secured into the recessed rails.--

In The Claims

Please amend claim 1 as follows:

1. (Amended) In a utility vehicle having a chassis supported on wheels, and an operator's cab supported by a metal cab frame, the improvement comprising:

an integral floor and fender structure [comprising] formed by a contoured body substantially composed of [reinforced composite] plastic material; and

said metal cab frame supported on a top side of said contoured body.

Please amend claim 2 as follows:

2. (Amended) The improvement according to claim 1, wherein said contoured body [plastic layer] comprises a fiberglass layer.

Please amend claim 3 as follows:

3. (Amended) The improvement according to claim 2, wherein said [floor and fender structure] contoured body comprises a fiberglass layer laminated between a top RIM layer and a bottom RIM layer.

Please amend claim 4 as follows:

4. (Amended) The improvement according to claim 1, wherein said [floor and fender structure] contoured body includes right and left fenders and a seat supporting platform integrally formed between said right and left fenders.

Please amend claim 5 as follows:

5. (Amended) The improvement according to claim 1, wherein said [floor and fender structure] contoured body comprises a foot supporting area and formed rail portions extending along said fenders and into said foot supporting area.

Please amend claim 6 as follows:

6. (Amended) The improvement according to claim 1, wherein said [fenders] contoured body includes [include] reinforced portions for interface with isolation mounts.

Please amend claim 7 as follows:

7. (Amended) The improvement according to claim 1, wherein said [floor and fender structure] contoured body includes a foot supporting area, seat and seatback supporting areas, fender covering area, and a rear wall [deck region].

Please amend claim 8 as follows:

8. (Amended) The improvement according to claim 1, wherein said [floor and fender structure] contoured body comprises a center layer covered on opposite surfaces by RIM material, wherein said RIM material comprises a composite plastic material.

Please amend claim 10 as follows:

10. (Amended) The improvement according to claim 1, wherein said contoured body [floor and fender structure] comprises a center layer covered on opposite surfaces by RIM material.

Please amend claim 11 as follows:

11. (Amended) The improvement according to claim 1, wherein said contoured body [floor and fender structure] comprises a laminated structure.

Please amend claim 12 as follows:

12. (Amended) The improvement according to claim 1 [11], wherein said contoured body comprises a substantially homogeneous fiber-reinforced plastic [at least one layer is molded onto said plastic layer].

Please amend claim 13 as follows:

13. (Amended) The improvement according to claim 1, wherein said [floor and fender structure] contoured body comprises integral features for mounting [a steel] said metal cab frame.

Please cancel claim 15 without prejudice.

Please amend claim 16 as follows:

16. (Amended) The improvement according to claim 1, wherein said [floor and fender structure] contoured body comprises integral features for storage of an operator's manual and tools.

Please amend claim 17 as follows:

17. (Amended) The improvement according to claim 1, wherein said [floor and fender structure] contoured body comprises integral features for [storage] forming window and door sealing surfaces.

Please add the following new claims:

18. (New) The improvement according to claim 1, wherein said contoured body comprises at least one side rail that forms a door sealing surface.

19. (New) The improvement according to claim 1, wherein said operator's cab comprises a roof and said metal cab frame comprises front and rear columns supporting said roof, and side members connecting said front columns to said rear columns, said side members being secured to a top side of said integral floor and fender structure.

20. (New) The improvement according to claim 19, wherein said contoured body comprises side recessed rails that are concave facing upward, said side members of said metal cab frame being adhesively secured into said recessed rails.

21. (New) The improvement according to claim 19, wherein said contoured body comprises longitudinally extending side recessed rails that are concave facing upward, said side members of said metal cab frame

longitudinally extending on lateral sides of said metal cab frame and being adhesively secured into said recessed rails.

22. (New) The improvement according to claim 1, wherein said contoured body comprises raised features for mounting controls.

23. (New) The improvement according to claim 1, wherein said contoured body comprises a recessed rail arranged for providing a chase for electrical wires.

24. (New) The improvement according to claim 1, wherein said contoured body comprises a recessed rail arranged for providing a chase for mechanical cables.

25. (New) In a utility vehicle having a chassis supported on wheels, and an operator's cab supported by a cab frame, the improvement comprising:

an integral floor and fender structure formed by a contoured body substantially composed of plastic material, said contoured body having longitudinally extending recesses open on a top side of said contoured body; and

said cab frame having spaced-apart, longitudinally extending bottom side members each at least partially secured within a respective one of said recesses.

26. (New) The improvement according to claim 25, wherein said contoured body includes right and left fenders and a seat supporting platform integrally formed between said right and left fenders, a foot supporting area, and formed rail portions extending along said fenders and into said foot supporting area.

27. (New) The improvement according to claim 26, wherein said contoured body comprises a fiberglass center layer covered on opposite surfaces by RIM material, wherein said RIM material comprises a composite plastic material.

28. (New) The improvement according to claim 25, wherein said contoured body comprises a substantially homogeneous fiber-reinforced plastic.

29. (New) The improvement according to claim 25, wherein said contoured body comprises side rails for forming window and door sealing surfaces.

30. (New) The improvement according to claim 25, wherein said operator's cab comprises a roof and said cab frame comprises a pair of front columns and a pair of rear columns supporting said roof, and said bottom side members connect said front columns to said rear columns.

31. (New) The improvement according to claim 25, wherein said utility vehicle comprises a tractor.

32. (New) The improvement according to claim 25, wherein said contoured body comprises raised surfaces for mounting controls.

33. (New) The improvement according to claim 25, wherein said contoured body comprises a recessed rail arranged for providing a chase for electrical wires and mechanical cables.

34. (New) The improvement according to claim 25, wherein said bottom side members are each at least partially secured within said respective one of said recesses by adhesive.